

I CLAIM:

1. A heat exchanging device comprising:

a container for receiving a fluid and including an upper portion and a lower portion,

a housing including an upper portion and a lower
05 portion communicating with said upper portion and said lower portion of said container respectively,

a tube extended through said housing for receiving another fluid, and

means for pumping the fluid in said container to
10 flow through said housing and to have a heat exchange with the fluid in said tube.

2. The heat exchanging device according to claim 1, wherein said pumping means includes a first driving device disposed in said housing to pump the fluid in
04 said container to flow through said housing.

3. The heat exchanging device according to claim 2, wherein said first driving device is a paddle wheel
03 disposed in said housing.

4. The heat exchanging device according to claim 2, wherein said pumping means includes means for
03 rotating said first driving device.

5. The heat exchanging device according to claim 4, wherein said rotating means includes a second driving device arranged close to said first driving device, and means for actuating said first driving
05 device.

05 6. The heat exchanging device according to claim 5, wherein said actuating means includes at least one first magnetic member disposed in said first driving device, and at least one second magnetic member disposed in said second driving device and actuated with said at least one first magnetic member of said first driving device for magnetically attracting and actuating said first driving device.

04 7. The heat exchanging device according to claim 5, wherein said second driving device is disposed in said tube for being driven by the fluid flowing through said tube.

05 8. The heat exchanging device according to claim 1 further comprising a casing disposed in said housing for forming and defining a peripheral chamber between said housing and said casing, said casing including an upper portion and a lower portion, and said tube being extended through said casing and extended outward from said lower portion of said casing and extended upward through said peripheral chamber formed between said housing and said casing.

04 9. The heat exchanging device according to claim 8, wherein said tube includes a coil portion engaged in said peripheral chamber formed between said housing and said casing.

10. The heat exchanging device according to claim 1 further comprising means for heating the fluid

2004-24-04 04:00

03 received in said container.

11. The heat exchanging device according to claim 10, wherein said heating means includes a pipe for receiving a fluid and engaged into said housing for allowing said fluids in said pipe and said housing to have a heat exchanging action therebetween.

12. The heat exchanging device according to claim 11, wherein said heating means includes an evaporator coupled to said pipe, and a compressor coupled to said evaporator and said pipe for pumping the fluid through said pipe.

13. The heat exchanging device according to claim 11 further comprising a casing disposed in said housing for forming and defining a peripheral chamber between said housing and said casing, said pipe is engaged in said casing.

14. The heat exchanging device according to claim 13, wherein said casing includes an upper portion and a lower portion, and said tube is extended through said casing and includes a coil portion disposed in said lower portion of said casing.